US Army Corps of Engineers

Designs for Riparian Corridors and Buffer Strips

Objectives

To provide Department of Defense (DoD) with improved technology and guidelines for management, restoration, and maintenance of riparian zones for both water quality and wildlife.

Las Vegas Wash, Nevada

Problem

Many riparian zones on DoD lands are badly in need of design criteria in planning for restoration and management, but existing guidelines for designing and establishing buffer strips and corridors are highly variable and often confusing. Few studies have addressed the compatibility of recommended riparian buffer strip widths with other important ecological functions such as their potential for functioning as wildlife habitat and as corridors for migration and dispersal of organisms.

Description

Technical guidelines are being developed from current literature and field studies that will assist DoD personnel in making decisions for buffer strip and corridor designs based on the most accepted scientific criteria. Technical publications are being developed on specific methodologies and techniques available for managers to solve various problems associated with corridors and buffer strips. Under the Corps' Ecosystem Management and Restoration Research Program (EMRRP), a field study was conducted to investigate variables that influence buffer strip and corridor designs along a riparian greenbelt between Ray Roberts Reservoir and Lewisville Lake, Texas.

Ray Roberts Reservoir Greenbelt, Texas

Status

The 3-year EMRRP research project on riparian buffers and corridors ended in FY99 and various technical notes, technical reports, and journal articles are currently being published. Additional regional studies are needed to assist in development of recommendations for specific riparian ecosystems.

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